Amendments to the Claims:

1 - 30. (canceled)

31. (new) A plasma-generating device, comprising

at least one first plasma-generating section, wherein at least one first plasma is generated; and

at least one second plasma-generating section, wherein at least one second plasma is generated;

wherein at a given point of time said first and said second plasmas are of different polarity.

32. (new) A plasma-generating device, comprising

at least one plasma-generating section, wherein a plasma is generated between electrodes; a conveyor for controlling the conveyance-speed of a gaseous medium through the plasma-generating section;

an AC power supply which is connected to said electrodes to generate alternating plasmas of different polarity;

wherein the power supply operates with a frequency that is adapted to the conveyance speed of the gaseous medium suchlike that substantially all of the gaseous medium is subjected to both of said plasmas of different polarity at least once.

- 33. (new) A device according to claim 31, wherein the device comprises a chamber and/or an open space allowing for contacting a gaseous medium with said first and said second plasmas.
- 34. (new) A device according to claim 31, wherein said first and second plasmas are corona discharge plasmas.

- 35. (new) A device according to claim 31, wherein said first and second plasma-generating sections are each supplied by an AC current.
- 36. (new) A device according to claim 35, wherein the first plasma-generating section and the second plasma-generating section are supplied with AC current of opposite phase.
- 37. (new) A device according to claim 35, wherein the first plasma-generating section and the second plasma-generating section are supplied with AC current of the same amplitude.
- 38. (new) A device according to claim 35, wherein the frequency of the current(s) is/are in the range from DC to about 500 kHz of AC.
- 39. (new) A device according to claim 31, wherein said first and second plasma-generating sections are supplied with DC current.
- 40. (new) A device according to claim 34, wherein the difference in potential between the electrodes is adapted such like that an electric field in the range of about 30 kV/cm is created nearby the electrode.
- 41. (new) A device according to claim 31, wherein said first and said second plasma-generating sections are integrated in a flow-through housing, possessing an inlet and an outlet for a gaseous medium.
- 42. (new) A device according to claim 41, wherein said flow-through housing allows for a division of incoming fluid into separate streams, and wherein said streams are each contacted with at least one of said first or second plasmas.

- 43. (new) A device according to claim 41, wherein said first plasma-generating section and said second plasma-generating section are arranged alternatingly between inlet and outle5.
- 44. (new) A device according to claim 31, wherein at least one electrode of the first plasma-generating section is electrically coupled to, preferably formed in one piece with, at least one electrode of the second plasma-generating section.
- 45. (new) A device according to claim 44, wherein the electrode of the first plasma-generating section, which is electrically coupled to, preferably formed in one piece with, at least one electrode of the second plasma-generating section, is formed as a hollow body, preferably a hollow cylinder, possessing a plurality of tips on at least one end of the hollow body.
- 46. (new) A method of treating a gaseous medium with a plasma-derived reactive species,

said method comprising steps of:

generating at least one first plasma;
generating at least one second plasma;
wherein said first and said second plasmas are of different polarity;
contacting the gaseous medium with said first and said second plasma.

- 47. (new) A method according to claim 46 wherein the gaseous medium is conveyed with a conveyance velocity which is chosen suchlike that substantially all of the gaseous medium is subjected to plasmas of different polarity at least once.
- 48. (new) A method according to claim 46 wherein

the at least one first plasma is generated in at least one first plasma-generating section;

the at least one second plasma is generated in at least one second plasma-generating section,

wherein at a given point of time said first and said second plasmas are of different polarity.

- 49. (new) A method according to claim 46, wherein said first and second plasmas are corona discharge plasmas.
- 50. (new) A method according to claim 46, wherein said first and second plasma-generating sections are supplied with AC current.
- 51. (new) A method according to claim 50, wherein the first and the second plasma-generating sections are supplied with AC current of opposite phase.
- 52. (new) A method according to claim 51, wherein the first and the second plasma-generating sections are supplied with AC current of the same amplitude.
- 53. (new) A method according to claim 50, wherein the frequency of the current is/are in the range of DC to about 500 kHz.
- 54. (new) A method according to claim 46, wherein said first and second plasma-generating sections are supplied with DC current.
- 55. (new) A method according to claim 46, wherein said first and said second plasmas are generated in a flow-through housing, possessing an inlet and an outlet.
- 56. (new) A method according to claim 55, wherein said gaseous medium is divided in separate streams within said flow-through housing, and wherein said streams are each contacted with at least one of said first or second plasmas.

- 57. (new) A method according to claim 55, wherein the gaseous medium is subsequently contacted between the inlet and the outlet of the flow-through housing with said first plasma and said second plasma, or vice versa.
- 58. (new) A method of sterilizing a gaseous medium with a plasma-derived reactive species,

said method comprising steps of:

generating at least one first plasma; generating at least one second plasma; wherein said first and said second plasmas are of different polarity; contacting the gaseous medium with said first and said second plasma.

59. (new) A method according to claim 46, comprising a further step of controlling the conveyance velocity of a gaseous medium through the device in coordination with the frequency of an AC power supply connected to plasma-generating electrodes in such a way as to allow substantially all of the gaseous medium to be subjected to plasmas of different polarity at least once.